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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): Stavrianopoulos et al.

Serial No.: 10/763,076

Filed: January 22, 2004

For: LABELING REAGENTS COMPRISING  
APHENYLIC ANALOGS OF RHODAMINE  
DYES

Group Art Unit: 1637

Examiner: Jezia Riley

527 Madison Avenue (9<sup>th</sup> Floor)  
New York, NY 10022-4304  
March 5, 2007

**FILED BY EXPRESS MAIL**

Mail Stop Amendments  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**REPLY TO SEPTEMBER 8, 2006 OFFICE ACTION**

Dear Sirs:

This paper (hereinafter referred to as "Reply") is in response to the Office Action mailed on September 8, 2006 (a copy of which is attached herein as Exhibit 1) in connection with the above-identified application. A response was originally due on December 8, 2006. A Request for Extension of Time (Three Months) is accompanying this paper (attached herein as Exhibit 2). Upon granting of the extension request, the new deadline for responding to the September 8, 2006 Office Action is March 8, 2007. Accordingly, this Reply is being timely filed.

Enz-61(D2)

Stravrianopoulos et al.

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22313-1450.

  
Natalie Bogdanos

Reg. No. 51,480

3/5/07  
Date

Claims 287, 290, 295-297, 300-302 stand rejected under 35 U.S.C. 102(b), as being anticipated by Prober et al. (EP0252683B3). The Examiner states the following:

Prober discloses a labeling reagent comprising an aphenylic analog of a rhodamine dye, said analog comprising at least one reactive group for attaching a target (nucleotide). The reactive group comprises hydroxyl. (Page 9 and claims). The nucleotide comprises a phosphate (Page 25-28).

Claims 288-289, 291-294, 298, 299, 303 are objected to as being dependent upon a rejected base claim.

Applicants respectfully disagree with the Examiner's basis for rejection. The Prober et al. reference (hereinafter referred to as "Prober") does not disclose a labeling reagent comprising an aphenylic analog of a rhodamine dye. While both the present invention and Prober are concerned with xanthene dyes, the identity of a member of the xanthene dye family depends on the type of groups which are attached to the xanthene core. When there is a nitrogen at each end of the xanthene moiety, they are known as rhodamine dyes; when there is an oxygen at each end, they are fluorescein dyes; and when there is an oxygen at one end and a nitrogen at the other end, they are rhodol dyes. The present invention discloses novel rhodamine dyes, which are xanthene rings with a nitrogen at each end. A rhodamine dye is specifically claimed in claims 287 and 297, and the structures shown in claims 288, 289, 298 and 299 are immediately recognizable as rhodamine dyes. In contrast, Prober does not disclose, describe or use rhodamines. Prober does disclose and describe fluorescein dyes, which are xanthene moieties with oxygen at each end. Chemically speaking, the dyes described by Prober would never be considered to be rhodamine dyes by one skilled in the art.